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ABSTRACT

Emergence of a dual agricultural system, need for sophisticated knowledge and equipment, declining importance of labor, and geographic and organizational concentration of the production and processing of certain commodities are creating changes in rural communities. While some changes will have negative social/economic impacts, the importance of these changes for rural communities should not be exaggerated. Although many rural communities, especially in commercial farming areas such as the corn belt, are heavily dependent on agriculture, much of agriculture is also dependent on the rural community. Aspects of agricultural/community relationships being studied include agriculture and social interaction/quality of life, agriculture and trade patterns, farm and nonfarm income/employment in rural communities, development of satellite systems, loss of the value added nature of the farm product, and concentrated production systems. Future descriptive/analytical study of contemporary rural communities should focus on primary mode of production and proximity. to metropolitan areas. Failure to recognize social, economic, and demographic diversity within rural areas, combined with changing relationships between agriculture and the remainder of the rural community leads to inaccurate development policies. With the current crisis in agriculture producing major changes in local agribusiness structure, it is imperative that researchers, extension personnel, and policy-makers be aware of current structures and their interrelationships in rural communities. (NEC)

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AGRICULTURE AND THE COMMUNITY: THE SOCIOLOGICAL PERSPECTIVE

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AGRICULTURE AND THE COMMUNITY: THE SOCIOLOGICAL PERSPECTIVE

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One of the major concerns of sociologists interested in agricultural issues has been the relationship between agriculture and the rural community. The long-standing thesis has been that the social and economic dimensions of rural communities were dependent upon the agricultural sector. Researchers, drawing from a variety of theoretical perspectives, found that changes in the agricultural sector, such as increases in farms larger than what is usually referred to as family farms, led to changes in the community.

The literature on the relationships between farm structure and the characteristics of the communities can be divided into two categories. The first focuses on changes in the characteristics of agriculture and the difficult to quantify, non-economic dimensions, such as quality of life. The second focuses on changes in agriculture and trade patterns.

We will start by briefly reviewing the literature on the relationship between agriculture and the community. Next, we will focus on the changing sources of income and employment in rural communities. This perspective will show a reversal in the dependency relationship. In many rural communities today, farming is dependent on non-agricultural employment and income. Finally, we will suggest some possible community types of the future.

Agriculture and Social Interaction/ Quality of Life

The number of farms in the United States has declined steadily since 1935. More recently, a dual agricultural system has begun to emerge with a few large farms and a host of small farms. In addition, some changes are occurring in the organization of agricultural production and processing. What effects do these changes have on the local community? Some changes are purely economic. Fewer consumers mean fewer retail goods and services purchased. But beyond this, other changes affect the social institutions and the quality of life.

Beginning in the late 1960s and continuing into the 70s, a number of studies were conducted which focused on the community and the sociological consequences of changes in agriculture. Most of these studies shared the hypothesis developed by Goldschmidt (1978a) in a 1940s California study. This hypothesis was that changes in farm size and structure would lead to changes in the rural community.

In Goldschmidt's study, two communities were examined. Arvin was characterized by large farms with a hired labor force, while Dinuba was surrounded predominately by family owned and operated farms. The community surrounded by family farms ranked higher than Arvin on a number of quality of life and social indicators, such as family income, level of living, social and physical amenities, social and religious institutions and the degree of local control over the political process. The results of the study were politically unpopular and have been criticized on methodological grounds. In fact, the study was so unpopular that it was never published by USDA for whom Goldschmidt was working.

In 1970, the same two California communities were reexamined by LaRose (1973) and yet again by the Community Services Task Force of the

Small Farm Viability Project (1977) in the mid-1970s. Although neither study sought to be as thorough and as comprehensive as the original, the findings indicated that the differences in the social and economic dimensions of the two communities were as great or greater than in the 1940s. In an effort to test the same hypothesis using a different method, 130 towns in the San Joaquin Valley of California were examined. The researcher concluded that "the smaller scale farming areas tended to offer more to local communities than their larger counterparts" (Small Farm Viability Project, 1977:242).

The California studies were not specific as to whether they were examining farm size or the social structure of farming. The assumption was that in California, larger scale farms were larger-than-family farms. Often they are referred to as corporate farms or industrial type farms. Neither did the researchers differentiate between small and medium size farms, both of which were assumed to be family farms. Researchers in the Midwest and Southeast, however, need to be cautious in the use of these concepts, since larger size may or may not be related to changes in the structure of farming. The trend over the past several decades toward larger farms in the Midwest has not lead to a change in the structure of farms.

In the late 1950s, Ploch (1960, 1965a and 1965b) focused on the relationship between the changing structure of farms and the rural community. He examined the characteristics of communities in which the production of eggs and broilers occurred under contract and compared them to communities in which the production of eggs and broilers was by independent producers. He concluded that there was little evidence that

the two types of poultry producers were associated with different community status levels.

In 1969, Heffernan (1972) compared the social involvement in community activities of those involved in contract farming, larger-than-family farms and family farms. The conclusion was that there was little difference in the community activities of those working in contract farming and family farming systems, but there was a significant difference in the social participation of the workers and managers in larger-than-family farms. The managers were more involved in community and political activities than were the workers. A follow-up of the farm families involved in contract production and family farm operations was conducted in 1981 (Heffernan and Jenkins, 1983). Findings indicated few differences between those producing poultry under contract and those producing feeder calves for a relatively competitive market. Beef producers were slightly more involved in social activities in the community, but poultry producers received slightly higher income from farming.

A study similar to the 1969 Louisiana study was conducted about the same time in Wisconsin. The study examined some of the community activities of those working on family farms, larger-than-family farms and industrial farms. Individuals on family farms were more involved in local volunteer associations and political and social activities than were workers on the other farm types (Rodefeld, 1974; Martinson, et. al., 1977). A study of grape producers in Missouri in 1976 (Heffernan and Lasley, 1978) produced similar conclusions. In the mid-1970s, a study done at Kansas State (Flora and Conby, 1977) tested the hypothesis derived from Goldschmidt's earlier research. They concluded that as

corporations become more involved in agriculture there would be a decline in "mean community well-being". At about the same time, Goldschmidt (1978b) used secondary data to show that large scale farm operations were positively associated with the proportion of the community population located in the lower class. He concluded that family farms are positively related to democratic rural communities. A replication of Goldschmidt's second study was conducted at Michigan State (Harris and Gilbert; 1979). It also supported the hypothesis.

The list of studies could be continued drawing from researchers in Iowa, New York, and sociologists and economists in several states in the Southeast who are completing a regional project titled "Changing Structure of Agriculture; Causes, Consequences and Policy Implications" (S-148). The growing body of literature suggests that even though different methodologies were utilized and studies were conducted over several years and in a number of geographic settings, the findings generally support the hypothesis that agricultural structure is related to different types of social interactions in rural communities.

Agriculture and Trade Patterns

A second community issue raised by changes in the size and structure of agriculture focuses on trade patterns. The primary question raised is: do large scale farm operators behave differently in their purchases of farm supplies and their sale of products than small scale operators? An assumption exists that large scale operators are more selective and will travel farther than small scale operators. Unpublished data from the 1969 Louisiana study showed few differences in the distance that family farmers, contract farmers or larger-than-family farm owner/managers and

their families traveled for the purchase of farm or personal goods and services. Likewise, there were not many differences in 1981, nor were there any major differences in distance traveled between 1969 and 1981. (Heffernan and Jenkins, 1983)

In the summer of 1980, Korsching (1984) conducted a similar study of trade patterns in three Iowa watersheds. Drawing heavily on Goldschmidt, he hypothesized that size of the farming operation is positively related to the purchasing of goods and services in more distant trade centers. He looked at distances traveled for farm inputs (machinery, feed, seed, and fertilizer), farm enterprise and farm household needs (gasoline, fuel, lumber, hardware, legal/tax services and financial services) and consumer goods and services (automobiles, groceries, clothing, furniture and recreation). He concluded that Goldschmidt's thesis did not hold in the cornbelt in Iowa. There were very few significant differences in the mean value of acres operated and gross farm income between farmers who purchase in small, local trade centers and farmers who purchase in large, distant trade centers. For the few cases in which there was a significant difference, large farmers were as likely to purchase in small, local trade centers as were small farmers. As in the case of the Louisiana study, there was a tendency for farmers to travel a shorter distance for bulky products such as feed and fertilizer and to travel farther for machinery. Also, the farm families were more likely to travel a greater distance for consumer goods and services than they were for farm inputs. This suggests that the trade pattern for farm inputs may not be the same as the trade pattern for consumer goods and services.

In response to some Missouri agricultural leaders suggesting that 12 major agricultural trade centers (megacenters) were emerging in the state, a similar study was conducted in Missouri. In the fall of 1984, we received 2,004 completed questionnaires from a random sample of Missouri farm operators. The farm operators were asked how far they traveled for selected goods and services both for the farm and for the family. Data in Table 1 indicate that farm operators on large farms do not travel any farther for their goods and services than do operators of medium size or small farms. (Large farms were those with agricultural sales over $100,000.) The data also suggest little change in the distance farmers travel for farm inputs over the past 10 years. (See table 2.) Only about 10 percent of the respondents indicated they traveled farther for farm inputs today than they did 10 years ago. The data suggest that more farm families are traveling farther today for consumer goods and that farm families travel farther for consumer goods than farm inputs.

Our conclusion is that there is little evidence to suggest that a major trend is underway changing the travel patterns for the purchase of farm inputs. We are not suggesting that the numbers of agricultural suppliers and markets will not decline. Indeed they will. But, they will not in the foreseeable future be grouped into agri-megacenters. Although social relations may change in some rural sommunities, changes in neither structure or size seem to indicate a major change in the proportion of the economic base which is derived from agriculture.

Sources of Income in Rural Communities

The relationship between agriculture and the rural community is further complicated when one looks at the source of employment in rural communities. An assumption exists that in most rural communities farming and jobs related to farming are the basic sources of employment. Undoubtedly, this was correct several decades ago for most rural communities, but this assumption, which continues to receive support by persons sho hold agrarian fundamentalism beliefs, is questionable today. According to this thesis, farming is the source of virtually all income. Therefore, as agriculture goes, so goes the community, the nation and the world.

Starting after World War II, the soft goods and shoe industries moved into the South and then into the Ozarks. These industries were followed by other labor intensive industries. (Summers, et al., 1975) They hired predominantly women, most of whom resided on farms. Thus, a small scale farm which by itself would not produce an adequate family income became part of a package of income sources.

Another significant source of employment expansion was created with the development of retirement programs that encouraged the movement of elderly to many rural areas. These retirees brought wealth with them in the form of transfer payments. Often retirement communities were associated with another growth industry, recreation. The lakes, rivers, seashores and mountains became rural America's playgrounds, and at the same time, provided local employment. Many of the colleges, universities, state capitals, state prisons, and state mental nospitals are located in relatively small communities and thus their employment is available to people residing on farms or in small towns.

During this same time, better and cheaper transportation and the relocation of industries within metropolitan areas have encouraged commuting to metropolitan areas from rural communities.

These major changes in types of employment in rural areas illustrate the growth of nonfarm employment and nonfarm sources of income in most rural contemporary rural communities. In most rural communities, the full time commercial farm operators are today a small minority. There are, of course, communities and areas where this is not true, but these are the exceptions, and not the rule. Ross et al (1984) in their review of changes in rural America drew these conclusions:

- The dominance of agriculture declined steadily. The number of farms dropped to under 3 million, and farm population was less than 10 percent of total U.S. population by the late sixties (U.S. Department of Agriculture, 1981; Beale, 1978).
- Rural industrialization began to open up new job opportunities, particularly in manufacturing (Summers et al., 1976).
- Farm and nonfarm women began to enter the labor market in record numbers. Employment growth in the 1960's was due largely to female employment. About 36 percent of women 14 and over were in the labor force in 1970 (Brown and O'Leary, 1979).

Employment of various types is a major source of income in most rural communities. However, transfer payments, primarily social security, are more important than any type of employment as a source of income in a majority of rural Missouri counties. Transfer payments are in essence "invisible" sources of income and not recognized for their importance in local communities, even by many researchers (U.S.D.A., 1984).

Ross et al.(1984) delineated seven types of rural counties using factor analysis. Agriculture was one of the types and included only 29 percent of the nonmetropolitan counties in the U.S. Agricultural counties were defined as those in which 20 percent or more of labor's and proprietors' income came from agriculture. The types of counties were not mutually exclusive. Twenty-seven percent of the counties overlapped into two or more types and 15 percent fell in none of the seven. Thus, in less than 30 percent of the nonmetropolitan counties did agriculture account for as much as one-fifth of the labor and proprietor income.

A higher cutting point (30 percent of labor's and proprietors' income) was used to define manufacturing counties, but almost as many nonmetropolitan counties (28 percent) were included in manufacturing as in agriculture. If the same cutting point had been used, considerably more of the nonmetropolitan counties would have been defined as manufacturing than as agricultural. Other Counties have recreation and/or retirement or other service industries as their most important sources of employment. The supremacy of agriculture in most nonmetropolitan counties has declined.

The movement toward a dual agriculture in the Midwest has become well-documented following the 1982 Agricultural Census. In all states in the Midwest, farms of less than 50 acres increased in the 1978-82 period. Likewise, larger farms (over 1,000 acres) also increased in number. In fact, the Midwest was somewhat different relative to other parts of the country in that it experienced significant increases in farms of over 2,000 acres. With the increases in the numbers of both large and small farms, it is not surprising that medium size farms (50 to 1000 acres) decreased in number.

The explanation for the increase in the number of small farms is that these farm families depend heavily on nonfarm income. The data for the entire country support this proposition. Families on farms of less than 50 acres received an average of $17,000 of nonfarm income and only a few thousands dollars of farm income. The total income was about the average income for metropolitan families during the same time.

In Missouri, the profile of occupations held by people receiving farm income in 1979 was almost identical to that of the nonfarm employed labor force in the state (holding the proportion of farm operators constant). We found the same proportion of people receiving farm incomes who said they were professionals, operatives, etc., as those who did not receive farm incomes. Thus, the relatively high nonfarm income is not surprising. It is especially interesting to note that the average nonfarm income for farm families operating more than 1,000 acres is almost the same as for those on small farms (about $17,000 annually).

It is the families on medium size farms that receive relatively less nonfarm income. These are the farms that are rapidly declining in number. The reason usually given for the survival of the larger farms is that they are more efficient-sized operations. Yet, numerous studies have suggested that in the Midwest, most of the economics of scale can be obtained on a 500 or 600 acre farm. Perhaps nonfarm income is a major explanatory variable in the survival of large farms as well as small farms.

Today, agriculture in the Midwest is facing a major crisis. Survival of many of the farms will depend on access to nonfarm income. In our 1984 farm poll (Heffernan et. al, 1985), we found that in 33 percent of the farm families, some family member had taken a nonfarm job

in the past year. In another 19 percent of the families, a family member was still searching for a such a job. But even in better years, such as those upon which the 1982 Agricultural Census was based, nonfarm income was highly correlated with farm survival. Albrecht and Murdock (1984) found that nonfarm sustenance diversity and percent of total acreage in harvested cropland were by far the best two predictors of the amount of part-time farming. In essence, part-time farming existed where a variety of types of nonfarm employment was available and where row crop agriculture was not a major portion of the agriculture.

In rural America there is a very close tie between nonfarm job opportunities available to residents of rural communities and the number of farms. Today, the average American farm family cannot maintain an adequate family income purely from farm sources. It is necessary to have some supplemental income for the family to stay on the farm. Data from our recent farm poll in Missouri supports the earlier USDA report that 92 percent of the farm families have some nonfarm income. The 1982 Census of Agriculture data revealed that about one half of the farm operators said farming was not their principal occupation. An interesting point is that for the United States, the number of farm operators working one hundred days or more off the farm has remained relatively constant since 1950, while the total number of farm operators has declined sharply. One implication is that those who worked off farm were more likely to continue as farmers. Another is that farm operators today are more likely to have major off farm employment.

In one of our most economically distressed agricultural counties of the state, many farms have ceased operation and more are facing bankruptcies. Many businesses have closed and two banks have been

closed. One of the major differences between this county and neighboring rural counties which have fewer farmers quitting is that a shoe factory and a cable factory which together employed about 500 workers were closed in the past three years. It is rather academic to decide whether the closing of the two industries or the financial condition in the farm sector is the major contributor to the financial conditions in the community, but the interaction of the two has been especially significant. The obvious conclusion is that either an improvement in the farming sector or an increase in nonfarm jobs in the county could have major impact in the county. Many of the farms could have been saved if nonfarm jobs had been available.

The dependency of agriculture on the nonfarm sector is especially important for the production of some commodities. Missouri, which is a small farm state, ranks second only to Texas in the number of feeder calves produced. The average herd size of beef cattle in Missouri is about 25. Feeder calf production is the major enterprise on small Missouri farms. The evidence is quite clear that if feeder calf producers calculated a reasonable economic return for their land, labor and cattle investment, the vast majority could not show a profit (Jacobs, 1984). Data collected from members of the Mail-In-Records Association at the University of Missouri suggest that the production of feeder calves is not an economically profitable operation. One must look for other motives to explain why farmers continue in the production of feeder calves. The urban to rural migration and the numerous residential preference studies suggest many Americans like rural living and want to own some land (Zuiches, 1982). Often the less expensive marginal land, which is considered to be most desirable for a rural residence, is also

most suited to producing pasture and hay. The land is often purchased primarily for residential purposes and not for producing beef. Most beef producers do not expect an economic return for their land and labor. The land is for their residence and so-called labor may be a benefit (they enjoy working with cattle) and not a cost. Nonfarm jobs in Missouri subsidize the feeder calf industry. Families who raise such other commodities as poultry and feeder pigs are also heavily dependent upon nonfarm income. Seventy-two percent of the U.S. farm families get ninety-nine percent of their net family income from non-farm sources.

In the areas of Missouri not suited to intensive crop production, the continued existence of farming is very highly dependent upon nonfarm jobs being available to the farm families. If rural communities in most areas of the United States have major nonfarm income sources and reasonably priced land available, they will also have considerable numbers of small farmers. Given the financial problems faced by the majority of medium and large farms operations today, nonfarm income sources can mean the difference between survival and failure of these farming operations. The farming and non-farm sectors of rural communities have become so interdependent that it has become impossible to speak of one as the dependent and the other the independent variable.

Communities of the Future

Although much agricultural production, such as feeder calves and crops require considerable space, modern technology has made possible the confinement raising of several types of livestock. We suggest the relationship between agriculture and community will be different for communities characterized by geographically dispersed farms as compared

to highly concentrated, specialized farms. We will first examine communities which serve the geographically dispersed agricultural systems. Then we will examine the relationship between the community and concentrated production systems.

The Development of Satellite Systems: The studies of trade patterns do not suggest that smaller rural communities will be bypassed in the servicing of agriculture. However, changes occurring in the organization of agriculture may lead to a concentration of control in some communities.

The increasing need for specialized knowledge, skills and equipment (capital) to service the agricultural production sector will prevent every small equipment, chemical, and marketing facility from providing a full array of services. The specialized services needed by an industrial agriculture will be provided by a few, large, centralized facilities. These centralized facilities will be directly tied to satellite facilities in other rural communities following a pattern that has developed in the organization of rural health care. It is possible that the centralized facility and the satellite facilities may be owned by an individual or group of individuals residing in the community. On the other hand, the centralized facility may be owned by the parent company and the satellites franchised to private individuals as is done today.

Modern communication, transportation and data processing will allow for a rather complicated inventory to be maintained between the centralized facility and the local branches. In the case of farm equipment, the local dealerships will not need to maintain an extensive inventory of expensive, seldom called for parts. These could be made available for rapid delivery from the centralized facility. Likewise,

relatively simple and routine repairs can be performed at the local dealership, but major overhauls requiring more skills and specialized equipment will be performed at the centralized facilities. This satellite system is already being developed. Equipment dealerships, as well as feed and fertilizer outlets, are being linked together formally or informally. For example, a locally franchised feed dealership maintains a very limited inventory of feed, but at least once daily a truck is sent to the manufacturing plant where an extensive inventory is maintained.

Given this scenario, the control and possibly much of the profit may be drained from most smaller communities. There will probably be a tendency for the centralized facilities to concentrate in certain key communities, but smaller firms with less economic power may choose to locate away from the key communities. If the parent company operates the centralized facility, the control and profit may be completely removed from the rural communities to faroff urban headquarters. But this system does maintain some agriculture related jobs in the smaller communities. The major impetus for this system as opposed to the megacenter, results from the farmers' need to reduce travel time and have faster service. The economic costs of travel per se are important considerations for farmers, but equally important is the cost of time, especially during the critical planting and harvesting periods. A large centralized bulk fertilizer plant 50 or 60 miles away will have trouble responding rapidly to farmers' needs. The alternative to a localized satellite system is for farmers to maintain a large inventory of their own. The cost of this inventory and the facilities required, in the case of bulk fertilizer for example, will encourage the continuation of local facilities. There

will, however, be a much tighter coordination between the local distribution facility, the centralized facility and, indeed, the parent company. In Missouri, the banking industry is moving in this direction through the use of holding companies. (Green, 1984)

The current farm crisis in the Midwest sets the stage for the larger parent companies, which in many cases are conglomerates that can survive losses in one sector, to become more directly involved in local distribution.

The local entrepreneur who is well-established will discourage the rapid transition to this satellite system. In many cases, the local owner is also engaged in a farming operation or has some other income source. The satellite system may enhance the development of "farmer-dealers." Such multiple sources of income may make the small local dealers more competitive than larger single product firms.

Loss of Value Added: Our above argument suggests that many local communities will continue to provide services for agricultural production, but changes in the agricultural services will result in smaller and smaller contributions to the economic base of the rural community.

Fifty years ago, labor was the major input variable in agricultural production. The farm family was relatively self-sufficient. The family produced the greatest proportion of what it consumed and it consumed a major portion of what it produced.

Commercial agriculture has meant a movement away from self-sufficiency and toward an increased dependency on purchased inputs and commercial markets. The trend toward the increased purchase of inputs has continued until today on many of our large commercial farms,

labor represents less than 10 percent of the input cost. Likewise, even the importance of the land input diminished as purchased inputs became more important.

The consequence of this is that large scale industrial farms resemble assembly plants. A variety of inputs are brought together and distributed spacially in a large geographic area. Energy, in the form of fossil-fuel and solar energy are utilized in the relatively long production process. The product is then assembled and shipped off for further processing or sales. The major difference between agriculture and other industries is the relatively long production time (Mann and Dickenson, 1978) and the large geographic area required for production. In the case of most livestock production, however, confinement operations have greatly condensed the geographic space required.

The point is, that over time, the farm family has contributed less and less to the value-added nature of the product. Increasingly, commercial farms assemble, as opposed to produce products. A measure of total farm sales or volume of food and fiber produced gives little indication of the importance of agriculture to the economic base of the community.

Likewise, local agribusiness firms such as farm equipment dealerships handle a much larger sales volume today because they are selling expensive equipment. However, little of the income from the sale is retained by the dealer or remains in the rural community to contribute to the economic vitality of the community. Most of what the farmer pays the implement dealer is transferred directly to the manufacturer of the equipment. Local machine and welding shops with relatively small

revenues may generate as much economic revenue for the community as do equipment dealers with much larger gross revenues.

Often, retail operators are so eager to compete for the "volume business" of the larger operators that they give relatively large discounts. The discounts usually reduce the "profit" earned by the local agribusiness firm. These discounts are taken from that portion of the sales which would otherwise contribute to the economic base of the local community. This local profit might be used for construction, hiring additional workers or increasing personal consumption by the families owning and/or working in the agribusiness firm.

As smaller farms are combined into larger farm operations, there is little doubt that the rural community loses some of its economic base even though there is no change in the volume or value of the agricultural products handled. In addition to the discounts or lower profits made per unit of input sold, the combining of smaller farms into larger farms often means a reduction in the labor input. Because the input cost that goes to labor is usually manifested in family consumer expenditures, a reduction in labor means a loss of family consumer expenditures in the community. Much of the input cost that goes to capital, energy and chemicals which replaces labor "passes through" the community contributing little to the economic base.

In summary, the economic benefit rural communities gain from agriculture is highly related to the value-added portion contributed by the agricultural community. Some of the changes which have taken place in agriculture have reduced the value-added and, thus, have undercut the economic viability of the rural communities.

Concentrated Production Systems: The foregoing discussion of trade patterns is applicable for areas producing grain and for ranching areas (including small scale cow-calf farms) which require large land areas. But livestock operations are being increasingly concentrated and the production and processing are frequently integrated into one firm.

The Louisana area, studied to examine possible effects of intregration of producers and processors, was selected because it had the largest concentration of broiler growers in the state. In broiler production, no retail businesses are involved. The birds remain the property of the integrating firm which provides the feed and the health supplies. Thus, the poultry industry purchases little from local merchants. The local processing plants of the integrating firms do, however, hire trucker drivers and others who are involved in picking up the poultry and delivering both the feed and the chicks. Because, integrating firms do not travel beyond 25 to 30 miles for their growers, an entire industrial organization is located in a rural community. The local plant hires workers for the feed processing, as well as for the processing of the birds. Although the integration of the poultry industry reduced the need for some local agribusiness firms and provided a mechanism to channel most of the profits from the poultry industry out of the local community, it did provide both farm and non-farm jobs in the area. This was at the expense of other communities which had formerly produced poultry.

In the 1981 Louisiana study, we did not formally interview the non-farm workers involved in the broiler industry. When talking with people in the community, however, it became obvious that many family members on smaller farms in this marginal agricultural area took non-farm

jobs with the integrating firm. Car pools and even company buses provided transportation to the plants some 25 miles away. It appears that communities in which broiler processing firm were located, exchange retail jobs for production jobs. Many of the production jobs required relatively unskilled workers and were not considered to be desirable jobs.

There are now about 237 poultry processing plants in this country and they will travel about 30 miles from their processing plant for their growers. In smaller communities these firms dominate the community. However, producers outside of this area have no markets, so production is geographically concentrated.

In some of the Plaines and Western states, including Kansas and Nebraska, beef slaughter and feeding has become the major industry for some rural communities. Communities such as Garden City, Kansas, home of the largest beef slaughter plant in the United States, are dominated by such industries. Slaughter plants were located near concentrations of cattle and feed production. But once the plants were built, they attracted more feedlots. Today, it is impossible to differentiate the farm and nonfarm segments of this industry. If the slaughter companies, such as Cargill (Excel), do not directly own and operate the feedlots, they have a major influence on them. The conclusion we draw is that as it became possible to produce animals in confinement, the production of these animals became clustered around a few communities. The industry both produces and processes the product in the same community. We might call these company communities or commodity communities.

We watch with interest the events occurring in the Midwest and Southeast in the hog industry. Although good data are lacking, it is

acknowledged that contract hog production is increasing rapidly. Hog production will likely follow the same path as beef feeding and poultry production because it can be done in a relatively small geographic area.

Summary

In summary, agriculture and rural communities will continue to undergo change. The emergence of a dual agricultural system, the need for sophisticated knowledge and equipment, the declining importance of labor and the geographic and organizational concentration of the production and processing of certain commodities will have a major impact on some rural communities. Some of these changes will have some negative social and economic impacts on the rural communities involved, but the importance of these changes for rural communities should not be exaggerated. The notion that rural communities are totally dependent upon agriculture is a belief system left over from the first half of this century when agriculture was virtually the only rural enterprise. Although, it is true that many rural communities are heavily dependent on agriculture, especially in the commercial farming areas such as the cornbelt, much of agriculture is also dependent on the rural community.

We are suggesting that different types of communities will emerge based on the interaction of agriculture and the community. In most of our rural areas, agriculture plays a minor role in the economic and social base of the community. In these areas small farms tend to dominate and they depend primarily on the employment opportunities available in the community. A few communities will be included in the production and processing of a very specialized commodity, such as broilers. In these commodity communities, the production and processing

will be controlled by a single firm and there will be little difference between those working in the production and those working in the processing sectors. The third type will be the pattern we have traditionally known in which the community serves, and is highly dependent on the farmers. But even here changes will occur. The importance of agriculture to the economic base will decline and the control of the local agribusiness firms will increasingly move out of the local community.

Sociologists and economists need to do more descriptive and analytical work on contemporary rural communities. We suggest that the primary mode of production and proximity to metropolitan areas are two of the most important characteristics affecting the viability of rural communities. Commercial agriculture is just one of several important primary modes of production found in rural communities. The loss or decline in any of the production modes can have major consequences for rural communities.

Powers and Moe (1982) concluded that "failure to recognize the [social, economic and demographic] diversity within the rural sector and between rural and urban areas has resulted in national growth and development policies insensitive to the spatial distribution of the effects". Similarly, we conclude that failure to recognize this social, economic and demographic diversity within rural areas combined with the changing relationships between agriculture and the remainder of the rural communities also leads to inaccurate development policies. With the current crisis in agriculture producing major changes in the local agribusiness structure, it is absolutely imperative that all people

involved in research, extension and policy-making be more aware of the current structures and their interrelationships in rural communities.

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Table 1: Average Distance Travelled for Selected Purchases by Farm Size (Sales)

	Farm Size (Size)		
Item Purchased	$40,000	$40,000-99,999	$100,000 or More
Appliances	16.84	17.41	15.98
Auto repairs	11.05	11.71	10.88
Men's clothes	20.49	20.98	21.09
Women's clothes	20.77	26.82	24.03
Commercial feed	9.94	12.60	10.98
Fertilizer	10.31	9.54	10.18
Chemicals	11.43	10.06	9.43
Equipment/repairs	17.81	17.22	16.03

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Table 2: Percent of Farmers Whose Current Source of Purchases is Farther Away Than the One Used Ten Years Ago - by Farm Size (Sales)

	Farm Size (Size)		
Item Purchased	$40,000	$40,000-99,999	$100,000 or More
Appliances	11.39	12.84	15.96
Auto repairs	9.98	12.30	10.20
Men's clothes	12.03	14.34	13.85
Women's clothes	12.31	16.10	14.87
Commercial feed	6.83	10.81	9.47
Fertilizer	5.81	8.85	7.25
Chemicals	5.88	9.06	5.24
Equipment/repairs	11.17	15.69	13.40

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